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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/663,631	09/16/2003	Daniel M. Joffe	72182CIP3	1917

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EXAMINER

NGUYEN, DUC MINH

ART UNIT PAPER NUMBER

2643

DATE MAILED: 05/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/663,631

Applicant(s)

JOFFE ET AL.

Examiner

Duc Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 6 and 10 is/are rejected.
- 7) ☒ Claim(s) 2-5, 7-9 and 11-13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 6, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bliven et al (5,111,497) in view of Furse (6,868,357).

Consider claims 1, 6, 10. Bliven teaches a method of determining the location of a fault along a wire-line (column(s) 3, line(s) 29-62), serving digital subscriber equipment at a location remote (102 in associated with 108) with respect to a central office facility (112), the location of the fault being determined relative to a line card (line card LC 104 in associated with master control MC 418, fig(s). 4a) installed in the central office facility, the method comprising applying a line card electrical stimulus to the wire-line from the central office (e.g., transmitting digital signal over the twisted pair to the remote terminal; column(s) 3, line(s) 55 to column(s) 4, line(s) 2; column(s) 10, line(s) 32-65); at the line card, measuring a response of the wire-line to the electrical stimulus (e.g., means for evaluating a returned amount of noise or reflected signal so as to evaluate the function of the line card, the twisted pair and/or remote terminal; column(s) 3, line(s) 55-62) and generating an output from which the distance from the line card to the fault can be determined (column(s) 13, line(s) 23-30, line(s) 51-56; column(s) 15, line(s) 19-47; column(s) 20, line(s) 61 to column(s) 21, line(s) 4; column(s) 25, line(s) 65 to column(s) 28, line(s) 32); and processing the output generated by the line card to determine in which portion of

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the wire-line the fault is located (column(s) 13, line(s) 23-30, line(s) 51-56; column(s) 15, line(s) 19-47; column(s) 20, line(s) 61 to column(s) 21, line(s) 4; column(s) 25, line(s) 65 to column(s) 28, line(s) 32).

Bliven does not teach measuring capacitance parameters of the wire-line in response to the electrical stimulus, and determining from the measured capacitance meters the distance from the line card to the open fault.

Furse teaches measuring capacitance parameters of the wire-line in response to the electrical stimulus, and determining from the measured capacitance parameters the distance from the line card to the open fault (see the entire abstract; column(s) 1, line(s) 18-29, line(s) 44-53; column(s) 2, line(s) 20-32; column(s) 3, line(s) 20-36) for the purposes of providing a FDR cable testing system that would enable detection of faults that are more difficult to detect than simple open and short circuits, namely cable fraying, wherein the fray may be shorted to ground or open to air (column(s) 2, line(s) 42-46).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Furse into the teachings of Bliven for the purposes mentioned above.

***Allowable Subject Matter***

3. Claims 2-5, 7-9, 11-13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Nguyen whose telephone number is (571)272-7503. The examiner can normally be reached on 7:00AM-3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kuntz Curtis can be reached on 571-272-7499. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Duc Nguyen  
Primary Examiner  
Art Unit 2643

4/21/05